

**CITY OF FAIRFIELD**

**RESOLUTION NO. 2016 - 221**

**RESOLUTION OF THE CITY COUNCIL APPROVING AN AGREEMENT BETWEEN  
THE CITY OF FAIRFIELD AND NICHOLS CONSULTING ENGINEERS FOR THE  
2016 PAVEMENT MANAGEMENT SYSTEM UPDATE**

**WHEREAS**, the City is required by the Metropolitan Transportation Commission to certify the Pavement Management System in order to be eligible for state and federal maintenance funding; and

**WHEREAS**, that certification requires the inspection of arterial and collector streets once every two years, along with the update of the inventory report; and

**WHEREAS**, Nichols Consulting Engineers, Chtd. is qualified to perform the inspection and Pavement Management System update.

**NOW, THEREFORE, THE COUNCIL OF THE CITY OF FAIRFIELD HEREBY RESOLVES:**


Section 1. The City Manager is authorized to enter into an Agreement with Nichols Consulting Engineers for the 2016 Pavement Management System Update in an amount not to exceed \$44,500.

Section 2. The Public Works Director is authorized to implement the above mentioned Agreement and administer a 10% management reserve of the agreement value, for a total not to exceed amount of \$48,950.

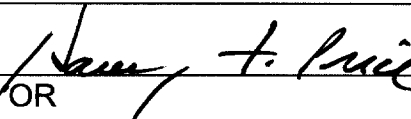
**PASSED AND ADOPTED** this 4th day of October, 2016, by the following vote:

AYES: COUNCILMEMBERS: PRICE/TIMM/BERTANI/MOY/VACCARO

NOES: COUNCILMEMBERS: NONE

ABSENT: COUNCILMEMBERS:   
NONE

ABSTAIN: COUNCILMEMBERS: \_\_\_\_\_

  
MAYOR

ATTEST:

  
CITY CLERK  
pw

## CONSULTANT SERVICES AGREEMENT

### 2016 Pavement Management Program Update

THIS AGREEMENT is made at Fairfield, California, as of October 25, 2016, by and between the City of Fairfield, a municipal corporation (the "CITY") and NICHOLS CONSULTING ENGINEERS ("CONSULTANT"), who agree as follows:

1) SERVICES. Subject to the terms and conditions set forth in this Agreement, CONSULTANT shall provide to the CITY the services described in Exhibit "A," which consists of the proposal submitted by CONSULTANT. CONSULTANT shall provide said services at the time, place, and in the manner specified in Exhibit "A."

2) PAYMENT. CITY shall pay CONSULTANT for services rendered pursuant to this Agreement at the times and in the manner set forth in Exhibit "B." The payments specified in Exhibit "B" shall be the only payments to be made to CONSULTANT for services rendered pursuant to this Agreement. CONSULTANT shall submit all billings for said services to the CITY in the manner specified in Exhibit "B."

3) FACILITIES AND EQUIPMENT. CONSULTANT shall, at its sole cost and expense, furnish all facilities and equipment which may be required for furnishing services pursuant to this Agreement.

4) GENERAL PROVISIONS. The general provisions set forth in Exhibit "C" are part of this Agreement. In the event of any inconsistency between said general provisions and any other terms or conditions of this Agreement, the provisions set forth in Exhibit "C" shall control.

5) INSURANCE REQUIREMENTS. The insurance requirements set forth in Exhibit "D" are part of this Agreement. In the event of any inconsistency between said general provisions and any other terms or conditions of this Agreement, the requirements set forth in Exhibit "D" shall control.

6) EXHIBITS. All exhibits referred to herein are attached hereto and are by this reference incorporated herein.

7) TERM. This term of the agreement shall be for three years from the effective date of the contract, with the ability to extend the agreement for two additional one year terms upon mutual consent of CONSULTANT and CITY's Public Works Director.

EXECUTED as of the day first above-stated.

City of Fairfield, a municipal corporation

By: \_\_\_\_\_

  
David A. White  
City Manager

CONSULTANT (NICHOLS CONSULTING ENGINEERS)

By: \_\_\_\_\_

  
Vice President



## EXHIBIT "A"

Pavement Management Update (2016)

Scope of Work

Revised: June 30<sup>th</sup>, 2016

### PROJECT UNDERSTANDING

It is NCE's understanding that the City of Fairfield's desires to update the StreetSaver pavement management system. The City's current system was last updated in 2014 as part of the PTAP15 grant program, and the City is currently using the online version of StreetSaver®. The 2015 update included collecting pavement distress data on the entire road network of approximately 320.6 centerline miles of pavements. This is shown in the table below.

Functional Class	Sections	Centerline Miles
Arterial	101	58.5
Collector	122	50.6
Residential	1322	192.0
Other (Parking Lots, Alleys, Reservoir Access Roads)	80	19.5
Total	1625	320.6

The City's certification will expire on October 1, 2016. Therefore, the City will need to update at least the arterials and collectors in to renew their certification status with MTC and continue to be eligible for regional discretionary funds. Specifically, the certification requirements are<sup>1</sup>:

*As part of the Pavement Management Program certification process, cities and counties must complete the following:*

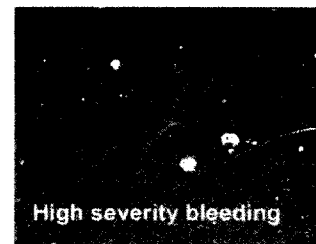
- *Two-year reviews and updates of all pavement inventory information*
- *Inspection of pavement sections every two years for arterial and collector routes, and every five years for residential streets*
- *Budget-need calculations for rehab or replacement of deficient pavement segments for the current year and for the next three years*

The following tasks detail NCE's approach and scope of work.

### SCOPE OF WORK

#### Task A – Condition Surveys & PCI Calculations

NCE will perform pavement condition surveys on the City's arterial and collector pavement network (approximately 109 miles). The pavement condition surveys will be performed in accordance with the established standards set forth in MTC's *Pavement Condition Index Distress Identification Manuals* and any variations as determined in the calibration



<sup>1</sup> <http://mtc.ca.gov/our-work/invest-protect/investment-strategies-commitments/fix-it-first/local-streets-and-roads-2>



meeting. A minimum of one sample unit per section will be inspected. Approximately one sample unit will be inspected for each 1,000 lineal feet of street. Any areas which are not typical of the entire section will be inspected and recorded as a special sample unit.

*Please note that NCE's scope of work and condition surveys do not address issues including but not limited to traffic, safety and road hazards, geometric issues, road shoulders, sidewalks, curb and gutters, drainage issues or short term maintenance that should be performed.*

NCE will be responsible for providing all equipment necessary for performance of this task. Should City personnel wish to observe NCE's crews during the surveys, we will be more than happy to accommodate the City. Up to four individual staff may also accompany NCE's field crews for up to 1 day each per week to gain hands on training at no additional cost. We have found that this is the most effective training method for agency staff, as they become part of the data collection crew, rather than just an observer.



#### Data Entry and PCI Calculations

All information collected from the condition surveys will then be entered into the StreetSaver database. This task will be performed at NCE's office in order to provide Quality Control of all data entered into the system. NCE will then perform the pavement condition index (PCI) calculations using the StreetSaver software, and correct any errors found.

#### Quality Control Checks

Quality Control (QC) checks are critical on a project such as this when such a large amount of data needs to be collected and processed. As part of NCE's goal to provide a superior quality product for our clients, we incorporate a QC component into all of our projects as detailed in the Quality Control Plan submitted to MTC. For this project, we have proposed the inclusion of a QC Manager, Dr. **James Signore**, who will have the following project responsibilities:

- Calibration of all data collection activities
- Review of field activities, including spot checks on the field crews
- A 5% re-inspection by an inspector other than the person who did the original surveys.
- Reviewing field procedures and making changes as needed
- Comparing the field data collected with on-site conditions
- Comparing the new PCIs with the previous PCI. If they differ by more than  $\pm 10$  PCI points, these sections are automatically flagged for further investigation.
- Review of all data entry functions, including random spot checks

The deliverables for this task will include the following:

- Section PCI Listing
- Updated StreetSaver database



### Task B – Update Maintenance & Rehabilitation (M&R) Decision Tree and History

NCE will update all maintenance and rehabilitation historical treatments for 2015-2016. The information should be in the following format:

- Street name
- Begin and ending limits
- Type of treatment e.g. slurry seal, overlay etc.
- Date of treatment
- Cost (optional)

We will also review the maintenance and rehabilitation (M&R) decision tree and unit costs. Recent bid tabs will be obtained from the City and reviewed to ensure that the most recent costs are used for the decision tree. If this data is not available from the City, NCE will use information collected from nearby cities to update the City's database.

The deliverables for this task will include the following:

- M&R Decision Tree
- M&R History Report

### Task C – Budgetary Analysis

Upon completion of the previous tasks, NCE will perform a **budget needs** analysis using an analysis period of at least 5 years, or other period to be determined by the City. This will identify M&R requirements for each pavement section and determine the total maintenance and rehabilitation requirements over the entire analysis period. The Needs Analysis identifies sections that need treatment and applies the M&R decision tree to each section. The costs are then summed for the entire period.

In simplistic terms, the Budget Needs analysis answers the questions: "If I have unlimited funding for street maintenance and repair, which streets should I fix? When should I fix them? What treatments should I apply? How much will it cost?"

This forms the basis for performing Budget Scenario evaluations, which optimize the street sections for repair under constrained budgets. The **Budget Scenarios** evaluation uses a weighted effectiveness rating to prioritize sections for repair under constrained, realistic, budgetary assumptions. The effectiveness rating is defined as the area under a pavement performance curve. The effectiveness rating is weighted to place a higher priority on certain streets, such as arterials and collectors.

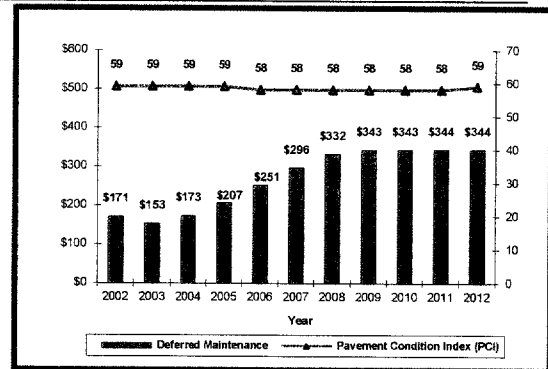
Simply put, this module answers the question: "If I only have limited funds for street maintenance and repair, which streets have the highest priority for repairs, when should I perform the repairs, and how much will it cost?"

Multiple funding scenarios may be performed to answer "what-if" questions (the real "meat" of any PMS). NCE will perform up to five budget scenario runs based on input from the City and in compliance with MTC's requirements. Typical funding scenarios include:



- Existing funding levels
- Funding levels required to maintain the PCI
- Funding levels required to increase the PCI
- Unconstrained funding

A sample graph from similar budgetary analyses is shown here.



#### Task D – Budget Options Report (BOR)

NCE will then prepare a draft Budget Options Report (BOR) that summarizes the overall condition of the pavement network, the maintenance & rehabilitation strategies used, the results of budgetary analyses, different budget scenarios and selected road sections for maintenance and rehabilitation. Finally, NCE will develop a 5-year work plan based on City's current budget included considerations such as:

- Possible corridor projects
- Inclusion of projects with dedicated funding e.g. STP, assessment or redevelopment
- Coordination with utility or other capital improvement projects (assumes City staff will provide project lists to NCE)
- Other high profile projects

Based on above information, NCE will prepare a 5-year work plan that includes recommended repairs on selected streets as well as the corresponding funding required. NCE will then provide GIS map with 5-year work plan based on City's GIS mapping in the database. NCE will also provide GIS based PCI condition maps for the current network condition and the projected network condition for the various budget scenarios. The BOR will comply with MTC's requirements.

Upon receipt of the City's comments on the draft BOR, a final BOR will be completed and submitted to both the City and MTC.

The deliverables for this task will include the following:

- Draft BOR (electronic)
- Final BOR (3 hard copies, 1 electronic copy)
- MTC certification letter



## COST ESTIMATE

The following table is NCE's cost estimate for the above scope of work.

Task Description	Hourly Breakdown by Personnel					Total Costs
	Project Manager	QC/QA Manager	Project Engineer	Technician	Clerical	
A. Condition Surveys and PCI Calculations	8	8	16	160		\$ 27,900
B. Update M&R History & Tree	4		16			\$ 3,200
C. Budgetary Analysis	8	4	40		8	\$ 8,800
D. Budget Options Report	4		24		4	\$ 4,600
<b>Total</b>	<b>24</b>	<b>12</b>	<b>96</b>	<b>160</b>	<b>12</b>	<b>\$ 44,500</b>

### Assumptions & Notes

Task A assumes 109 miles of arterials & collectors. Field training for 4 City staff for one day each is included.  
Meetings included in Tasks A and B.

## **EXHIBIT "B"**

### **PAYMENT**

- 1) The cost for services rendered by CONSULTANT under this Agreement shall be based on CONSULTANT's current hourly rates, attached with Exhibit A. Billings shall include the number of hours expended by each of the CONSULTANT's employees, plus reimbursables such as postage, delivery, reproduction, etc. Reimbursables shall be itemized on the billings. CONSULTANT shall provide an hourly rate fee schedule on an annual basis. Total payment for consulting services shall not exceed \$44,500.
- 2) Payment shall be made to CONSULTANT on a time and materials basis.
- 3) CONSULTANT shall submit invoices to CITY, Attention: Peter Wright, and CITY shall pay CONSULTANT within 30 days of receiving a proper invoice.



## EXHIBIT "C"

### GENERAL PROVISIONS

1) INDEPENDENT CONSULTANT. At all times during the term of this Agreement, CONSULTANT shall be an independent contractor and shall not be an employee of CITY. CITY shall have the right to control CONSULTANT only insofar as the results of CONSULTANT's services rendered pursuant to this Agreement; however, CITY shall not have the right to control the means by which CONSULTANT accomplishes services rendered pursuant to this Agreement.

2) LICENSES; PERMITS; ETC. CONSULTANT represents and warrants to CITY that CONSULTANT has all licenses, permits, qualifications, and approvals of whatsoever nature which are legally required for CONSULTANT to practice CONSULTANT's profession. CONSULTANT represents and warrants to CITY that CONSULTANT shall, at its sole cost and expense, keep in effect at all times during the term of this Agreement, any licenses, permits, and approvals which are legally required for CONSULTANT to practice his profession.

3) TIME. CONSULTANT shall devote such services pursuant to this Agreement as may be reasonably necessary for satisfactory performance of CONSULTANT's obligations pursuant to this Agreement. CONSULTANT shall adhere to the Schedule of Activities as described in their Executive Summary.

4) CONSULTANT NOT AN AGENT. Except as CITY may specify in writing, CONSULTANT shall have no authority, express or implied, to act on behalf of CITY in any capacity whatsoever as an agent. CONSULTANT shall have no authority, express or implied, pursuant to this Agreement, to bind CITY to any obligation whatsoever.

5) ASSIGNMENT PROHIBITED. No party to this Agreement may assign any right or obligation pursuant to this Agreement. Any attempted or purported assignment of any right or obligation pursuant to this Agreement shall be void and of no effect.

6) PERSONNEL. CONSULTANT shall assign only competent personnel to perform services pursuant to this Agreement. In the event that CITY, in its sole discretion, at anytime during the term of this Agreement, desires the removal of any person or persons assigned by CONSULTANT to perform services pursuant to this Agreement, CONSULTANT shall remove any such person immediately upon receiving notice from CITY of the desire of CITY for the removal of such person or persons.

7) STANDARD OF PERFORMANCE. CONSULTANT shall perform all services required pursuant to this Agreement. Services shall be performed in the manner and according to the standards observed by a competent practitioner of the profession in which CONSULTANT is engaged in the geographical area in which CONSULTANT practices his profession. All products which CONSULTANT delivers to CITY pursuant to this Agreement shall be prepared in a workmanlike manner, and conform to the standards of quality normally observed by a person practicing in CONSULTANT's profession. CITY shall be the sole judge as to whether the product of the CONSULTANT is satisfactory.

8) CANCELLATION OF AGREEMENT. This Agreement may be canceled at any time by the CITY at its discretion upon written notification to CONSULTANT. CONSULTANT is entitled to receive full payment for all services performed and all costs incurred up to and including the date of receipt of written notice to cease work on the project. CONSULTANT shall be entitled to no further compensation for work performed after the date of receipt of written notice to cease work. All completed and incomplete products up to the date of receipt of written notice to cease work shall become the property of CITY.

9) PRODUCTS OF CONSULTING. All products of the CONSULTANT provided under this Agreement shall be the property of the CITY.

10) INDEMNIFY AND HOLD HARMLESS.

a) If AGREEMENT is an agreement for design professional services subject to California Civil Code § 2782.8(a) and CONSULTANT is a design professional, as defined in California Civil Code § 2782.8(c)(2), to the fullest extent allowed by law, CONSULTANT shall hold harmless, defend and indemnify the CITY, its officers, agents, employees, and volunteers from and against all claims, damages, losses, and expenses including attorneys' fees arising out of, or pertaining to, or relating to the negligence, recklessness, or willful misconduct of the CONSULTANT, except where caused by the active negligence, sole negligence, or willful misconduct of the CITY.

b) If AGREEMENT is not an agreement for design professional services subject to California Civil Code § 2782.8(a) or CONSULTANT is not a design professional as defined in subsection (a) above, to the fullest extent allowed by law, CONSULTANT shall indemnify, defend, and hold harmless the CITY, its officers, agents, employees and volunteers from all claims, suits, or actions of every name, kind and description, brought forth on account of injuries to or death of any person or damage to property arising from or connected with the willful misconduct, negligent acts, errors or omissions, ultra-hazardous activities, activities giving rise to strict liability, or defects in design by CONSULTANT or any person directly or indirectly employed by or acting as agent for CONSULTANT in the performance of this Agreement, including the concurrent or successive passive negligence of the CITY, its officers, agents, employees or volunteers.

It is understood that the duty of CONSULTANT to indemnify and hold harmless includes the duty to defend as set forth in Section 2778 of the California Civil Code.

Acceptance of insurance certificates and endorsements required under this Agreement does not relieve CONSULTANT from liability under this indemnification and hold harmless clause. This indemnification and hold harmless clause shall apply whether or not such insurance policies are determined to be applicable to any such damages or claims for damages.

CONSULTANT'S responsibility for such defense and indemnity shall survive termination or completion of this agreement for the full period of time allowed by law.

11)PROHIBITED INTERESTS. No employee of the CITY shall have any direct financial interest in this agreement. This agreement shall be voidable at the option of the CITY if this provision is violated.

12)LOCAL EMPLOYMENT POLICY. The CITY desires wherever possible, to hire qualified local residents to work on city projects. Local resident is defined as a person who resides in Solano County. The CITY encourages an active affirmative action program on the part of its contractors, consultants, and developers. When local projects require, subcontractors, contractors, consultants and developers will solicit proposals from qualified local firms where possible.

As a way of responding to the provisions of the Davis-Bacon Act and this program, contractor, consultants, and developers will be asked, to provide no more frequently than monthly, a report which lists the employee's name, job class, hours worked, salary paid, city of residence, and ethnic origin.

13)CONSULTANT NOT A PUBLIC OFFICIAL. CONSULTANT is not a "public official" for purposes of Government Code §§ 87200 et seq. CONSULTANT conducts research and arrives at his or her conclusions, advice, recommendation, or counsel independent of the control and direction of the CITY or any CITY official, other than normal contract monitoring. In addition, CONSULTANT possesses no authority with respect to any CITY decision beyond these conclusions, advice, recommendation, or counsel.

14)EMPLOYMENT DEVELOPMENT DEPARTMENT REPORTING REQUIREMENTS. When the CITY executes an agreement for or makes payment to CONSULTANT in the amount of \$600 (six hundred dollars) or more in any one calendar year, CONSULTANT shall provide the following information to CITY to comply with Employment Development Department (EDD) reporting requirements:

a) Whether CONSULTANT is doing business as a sole proprietorship, partnership, limited liability partnership, corporation, limited liability corporation, non-profit corporation or other form of organization.

b) If CONSULTANT is doing business as a sole proprietorship, CONSULTANT shall provide the full name, address and social security number or federal tax identification number of the sole proprietor.

c) If CONSULTANT is doing business as other than a sole proprietorship, CONSULTANT shall provide CONSULTANT'S federal tax identification number.

## EXHIBIT "D"

### INSURANCE REQUIREMENTS

CONSULTANT shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the CONSULTANT, its agents, representatives, or employees.

#### 1) MINIMUM SCOPE AND LIMITS OF INSURANCE

a) Commercial General Liability coverage (occurrence Form CG 00 01) with minimum limits of \$1,000,000 per occurrence for bodily injury, personal injury, products and completed operations, and property damage. If Commercial General Liability or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.

b) Automobile Liability coverage (Form CA 00 01 with Code 1 – any auto) with minimum limits of \$1,000,000 per accident for bodily injury and property damage.

c) Workers' Compensation insurance as required by the State of California and Employers' Liability insurance, each in the amount of \$1,000,000 per accident for bodily injury or disease.

#### 2) INDUSTRY SPECIFIC COVERAGES

If checked below, the following insurance is also required.

- ☒ Professional Liability Insurance / Errors and Omissions Liability in the minimum amount of \$1,000,000 per occurrence.
- ☐ Pollution Liability Insurance in the minimum amount of \$1,000,000 per occurrence
- ☐ Garage Keepers Insurance in the minimum amount of \$1,000,000 per occurrence
- ☐ Fidelity / Crime / Dishonesty Bond in the minimum amount of \$\_\_\_\_\_
- ☐ MCS-90 Endorsement to Business Automobile insurance for transportation of hazardous materials and pollutants
- ☐ Builder's Risk / Course of Construction Insurance in the minimum amount of \$\_\_\_\_\_.

### 3) INSURANCE PROVISIONS

a) DEDUCTIBLES AND SELF-INSURED RETENTIONS. Any deductibles or self-insured retentions must be declared to and approved by the CITY. At the option of the CITY, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the CITY, its officers, officials, employees and volunteers; or the CONSULTANT shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

b) The general and automobile liability policies (and if applicable, pollution liability, garage keepers liability and builder's risk policies) are to contain, or be endorsed to contain, the following provisions:

- i) The CITY, its officers, officials, employees and volunteers are to be covered as insureds as respects: liability arising out of work or operations performed by or on behalf of the CONSULTANT; products and completed operations of the CONSULTANT; premises owned, occupied or used by the CONSULTANT; and automobiles owned, leased, hired or borrowed by the CONSULTANT. The coverage shall contain no special limitations on the scope of protection afforded to the CITY, its officers, officials, employees or volunteers.
- ii) For any claims related to this project, the CONSULTANT'S insurance coverage shall be primary insurance as respects the CITY, its officers, officials, employees and volunteers. Any insurance or self-insured maintained by the CITY, its officers, officials, employees or volunteers shall be excess of the CONSULTANT'S insurance and shall not contribute with it.
- iii) Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to the CITY, its officers, officials, employees or volunteers.
- iv) The CONSULTANT'S insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- v) Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the CITY.
- vi) The policy limits of coverage shall be made available to the full limits of the policy. The minimum limits stated above shall not serve to reduce the CONSULTANT'S policy limits of coverage. Therefore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this agreement, or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named insured, whichever is greater.

c) ACCEPTABILITY OF INSURER. Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to the CITY.

d) VERIFICATION OF COVERAGE. CONSULTANT shall furnish the CITY with original endorsements effecting coverage required by this Exhibit D. The endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. The endorsements are to be on forms provided by the CITY or on forms equivalent to CG 20 10 11 85 subject to CITY approval. All insurance certificates and endorsements are to be received and approved by the CITY before work commences. At the request of the CITY, CONSULTANT shall provide complete, certified copies of all required insurance policies, including endorsements effecting the coverage required by these specifications.

e) SUB-CONTRACTORS. CONSULTANT shall require all subcontractors to procure and maintain insurance policies subject to the requirements of Exhibit D. Failure of CONSULTANT to verify existence of sub-contractor's insurance shall not relieve CONSULTANT from any claim arising from sub-contractors work on behalf of CONSULTANT.